

**IN THE DRAWINGS:**

Replacement drawings have been filed herewith to correct the following minor informalities:

In FIGs. 1 and 10: The gate lines “G0,” “G1,” and “G2” have been corrected to --G1--, --G2--, and --G3-- as described in paragraphs [0005] and [0058], for example, of the originally filed specification.

In FIG.12, reference number “110” pointing to the dotted box encircling elements 112 and 114 have been renumbered as --116-- as described in paragraph [0072], for example, of the originally filed specification.

In FIG. 13, reference numbers “100” and “102” have been renumbered as --100a-- and --102a--, respectively, as described in paragraphs [0073] and [0074], for example, of the originally filed specification.

In FIG. 14, “multiplexor part” has been corrected as --multiplexer part-- to be consistent with the spelling used in the originally filed specification as used in paragraph [0090], for example.

Hence, Applicants submit that no new matter has been added, and therefore respectfully request that the replacement drawings be entered.

**REMARKS**

**Summary of Office Action**

Claim 1 stands rejected under 35 U.S.C. § 103(a) as allegedly being unpatentable over Enomoto et al. (U.S. Patent No. 5,796,379) in view of Kohno et al. (U.S. Patent No. 6,366,271).

Claim 2 stands rejected under 35 U.S.C. § 103(a) as allegedly being unpatentable over Enomoto et al. in view of Kohno et al. and further in view of Lin et al. (Pub. No. US 2001/0046002).

Claim 3 stands rejected under 35 U.S.C. § 103(a) as allegedly being unpatentable over Enomoto et al. in view of Kohno et al. and further in view of Zenda (U.S. Patent No. 5,592,187).

Claim 10 stands rejected under 35 U.S.C. § 103(a) as allegedly being unpatentable over Enomoto et al. in view of Kohno et al. and further in view of Seitz et al. (U.S. Patent No. 4,484,192).

Claim 12 stands rejected under 35 U.S.C. § 103(a) as allegedly being unpatentable over Enomoto et al., Kohno et al., and Seitz, and further in view of Lin et al.

Claim 13 stands rejected under 35 U.S.C. § 103(a) as allegedly being unpatentable over Enomoto et al., Kohno et al., and Seitz, and further in view of Zenda.

**Summary of Amendment**

Claims 1, 5, and 10 have been amended. New claims 20 and 21 have been added.

Claims 1-21 are currently pending for further consideration. No new matter has been entered.

**Allowable Subject Matter**

Applicants wish to thank the Examiner for indicating allowable subject matter in claims 4-9, 11 and 14-19. New claim 20 is claim 4 rewritten in independent form. Likewise, new claim 21 is claim 19 rewritten in independent form. Hence, Applicants respectfully submit that no new matter has been entered and new claims 20 and 21 are now allowable over the art of record.

As to the other claims, Applicants respectfully assert that claims 1-19 are now allowable over the art of record for the reasons stated below.

**All Claims Comply with §103**

Claim 1 stands rejected under 35 U.S.C. § 103(a) as allegedly being unpatentable over Enomoto et al. in view of Kohno et al., claim 2 stands rejected under 35 U.S.C. § 103(a) as allegedly being unpatentable over Enomoto et al. in view of Kohno et al. and further in view of Lin et al., claim 3 stands rejected under 35 U.S.C. § 103(a) as allegedly being unpatentable over Enomoto et al. in view of Kohno et al. and further in view of Zenda, claim 10 stands rejected under 35 U.S.C. § 103(a) as allegedly being unpatentable over Enomoto et al. in view of Kohno et al. and further in view of Seitz et al., claim 12 stands rejected under 35 U.S.C. § 103(a) as allegedly being unpatentable over Enomoto et al., Kohno et al., and Seitz, and further in view of Lin et al., and claim 13 stands rejected under 35 U.S.C. § 103(a) as allegedly being unpatentable over Enomoto et al., Kohno et al., and Seitz, and further in view of Zenda. These rejections are respectfully traversed as follows.

Independent claim 1, as amended, now positively recite, in part, “a timing controller for controlling polarity of the video data by supplying a selected polarity inversion signal from a

plurality of polarity inversion signals to the data driver.” (Emphasis added.) Similarly, independent claim 10, as amended, now positively recite, in part, the step of “controlling a polarity of the video data by supplying a selected one of the first and the second polarity inversion signals to the data driver.” Applicants respectfully assert that none of the prior art of record teach such a feature.

Enomoto et al. was relied upon as generally teaching an LCD data line driver and a method of driving the pixels. As acknowledged in the Office Action, Enomoto et al. only teaches one polarity signal (POL). (See, e.g., FIG. 9.) Hence, the Office Action relies upon Kohno et al.

Kohno et al. teaches an LCD having an “upper” data driving circuit 1a and a “lower” data driving circuit 1b. Kohno et al. teaches that a “first polarity inversion signal” is applied to the upper image signal lines and a “second polarity inversion signal” is applied to the lower image signal lines. (See, e.g., col. 3, ln. 66 – col. 4, ln. 6.) In other words, Kohno et al. does not teach a controller that applies “a *selected* polarity inversion signal from a plurality of polarity inversion signals to the data driver” as recited in amended claim 1 because in Kohno et al., the first polarity inversion signal is *dedicated* to the upper image signal lines and the second polarity inversion signal is *dedicated* to the lower image signal lines. Accordingly, Kohno et al. does not teach the step of “controlling a polarity of the video data by supplying a *selected* one of the first and the second polarity inversion signals to the data driver” as recited in amended claim 10.

As to claim 10, the Office Action further relies on Seitz et al. as allegedly teaching a method of driving an LCD device with the step of generating first and second polarity inversion

signals different from each other according to a number of horizontal synchronization signals supplied during a data blanking period. Applicants respectfully submit that Seitz et al. teaches a moving map display on a *cathode ray tube (CRT)* and has nothing to do with driving an LCD device. Hence, Applicants respectfully submit that Seitz et al. is inapposite to the present invention and therefore fails to cure any of the deficiencies of Enomoto et al. and Kohno et al. discussed above.

Therefore, for at least the reasons discussed above, Applicants respectfully assert that Enomoto et al., Kohno et al., and Seitz et al., whether taken singly or in combination, fail to teach or suggest the features recited in independent claims 1 and 10 as amended. Accordingly, Applicants respectfully request that the rejections to claims 1 and 10 be withdrawn.

As to dependent claims 2, 3, 12, and 13, these claims depend from respective base claims 1 and 10. Moreover, Lin et al. was only relied upon for teaching dot inversion method and Zenda is directed to plasma displays relied upon for teaching blanking periods. Hence, Applicants respectfully assert that Lin et al. and Zenda fail to cure the deficiencies of claims 1 and 10 discussed above. Accordingly, Applicants respectfully assert that Enomoto et al., Kohno et al., Seitz et al., Lin et al., and Zenda, whether taken singly or in combination, fail to teach or even suggest the features recited in claims 1-3 and 10, 12-13 and respectfully request that the rejections to these claims be withdrawn.

As claims 4-9, 11, 14-19 have been indicated as containing allowable subject matter, Applicants respectfully submit that these claims stand allowable.

**CONCLUSION**

In view of the foregoing, reconsideration and timely allowance of the pending claims are respectfully requested. Should the Examiner feel that there are any issues outstanding after consideration of the response, the Examiner is invited to contact the Applicants' undersigned representative to expedite prosecution.

If there are any other fees due in connection with the filing of this response, please charge the fees to our Deposit Account No. 50-0310. If a fee is required for an extension of time under 37 C.F.R. 1.136 not accounted for above, such an extension is requested and the fee should also be charged to our Deposit Account.

Respectfully submitted,

**MORGAN, LEWIS & BOCKIUS LLP**

Dated: January 4, 2006

By: 

Kyle J. Choi

Reg. No. 41,480

**Customer No.: 009626**  
**MORGAN, LEWIS & BOCKIUS LLP**  
1111 Pennsylvania Avenue, N.W.  
Washington, D.C. 20004  
Telephone: 202.739.3000  
Facsimile: 202.739.3001